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Marianne Hofmann

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WOODARD, EMHARDT, MORIARTY, MCNETT & HENRY LLP
111 MONUMENT CIRCLE, SUITE 3700
INDIANAPOLIS, IN 46204-5137

EXAMINER

HOEY, ALISSA L

ART UNIT

PAPER NUMBER

3765

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/559,095	Applicant(s) HOFMANN, MARIANNE	
	Examiner Alissa L. Hoey	Art Unit 3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-28 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-28 and 31-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This is in response to amendment received on 07/07/09. Claims 22-28 and 31-40 are pending and claims 1-21, 29-30 and 41 are cancelled.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 22-24, 27, 28, 32, 35, 37, 39 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Pampuch (US 4,174,710).

Pampuch teaches the following:

22. (Currently amended) A hood, in particular for a clothing item for protective and military purposes, such as an NBC protective suit, said hood (4) comprising:
a hood body (4) having a peripheral edge defining a face opening (see figure), said face opening being constructed and arranged for receiving a respirator (1);
a peripheral elastic hem (5)
attached to said peripheral edge (see figure 1: identifiers 4 and 5), said peripheral elastic hem being constructed and
arranged to extend around said face opening (see figure, identifier 5), said peripheral elastic hem (5) having an inner face and an outer face (see figure); and
a plurality of peripheral sealing elements ~~which are conjoined~~ to the inner

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face of said peripheral elastic hem (see column 2, lines 12-16), said plurality of peripheral sealing elements comprised of elastofibers and being constructed (inherent due to elastic material construction),
and arranged for abutment against and around the respirator received by said face opening (see figure and column 2 lines 12-16), wherein the individual sealing elements are in substantially parallel arrangement with each other (column 2, lines 12-16).

23. (Previously presented) The hood according to claim 22, wherein the sealing elements abut the respirator essentially linearly (column 2, lines 12-16: see figure 1).

24. (Previously presented) The hood according to claim 22, wherein the sealing elements project or protrude from the hem (column 2, lines 12-16).

27. (Currently amended) The hood according to claim 22, wherein the sealing elements are each configured as one of the forms selected from the group consisting of a sealing ring, as a sealing lip or as a sealing protrusion (column 2, lines 12-16).

28. (Currently amended) The hood according to claim 22, wherein the sealing elements are constructed and arranged as one of the structures selected from the group consisting of thread, ligament-, string- or strip- shaped or webbed- or honeycomb-shaped (figure 1; column 2, lines 12-16).

32. (Previously presented) The hood according to claim 22, wherein the elasticity of the sealing elements would inherently corresponds at least essentially to the elasticity of the hem (column 2, lines 12-16).

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35. (Previously presented) The hood according to claim 22, wherein the hood including the face opening comprises, on the side portion of face opening, a fastener (see figure).

37. (Previously presented) A clothing item, in particular for protective and/or military purposes, such as an NBC protective suit (4) or the like, comprising a hood as defined in claim 22 (4).

39. (Currently amended) A clothing item, in particular for protective and military purposes, such as an NBC protective suit or the like, said clothing item comprising: a clothing body (4) defining at least one opening for a body part, such as a hand, arm, foot, leg or head (see figure); having a peripheral elastic hem (5) attached to said clothing body (column 1, lines 58-62), said peripheral elastic hem (5) being constructed and arranged to extend around said opening (figure 1), the opening being provided for receiving a further clothing item or an equipment article (see figure 1; identifier 4 and 1), said peripheral elastic hem (5) having an inner face and an outer face and a plurality of peripheral sealing elements which are conjoined with the to the inner face of said peripheral elastic hem said plurality of peripheral sealing elements comprised of elastofibers (inherently, due to elastic material construction) and being constructed and arranged for abutment against and around the further clothing item or equipment article, wherein the individual sealing elements are in substantially parallel arrangement with each other (column 2, lines 12-16).

40. (Currently amended) A method for closing out the transition between a

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portion of a clothing item (4) on the one hand and a further clothing item or equipment article (1) on the other hand by using an elastic hem (5), comprising the steps of:

providing an elastic hem (5) having an inner face and an outer face;

forming an joining said elastic hem to said clothing item (column 1, lines 58-62) wherein

said elastic hem (5) faces the further clothing item or the equipment article;

providing a plurality of sealing elements in the form of elastofibers (inherently, due to elastic material); and conjoining said plurality of sealing elements with the inner face of said hem for closeout abutment of the further clothing item or equipment article (see figure 1: column 2, lines 12-16).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25, 26, 31, 33 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Pampuch (US 4,174,710).

Pampuch teaches a garment as described above in claims 21 and 24. However, Pampuch fails to specifically teach the dimension the sealing elements project from the hem, the method of attaching the sealing elements to the hem, the sealing elements thickness in comparison to the hem, the extensibility of the sealing elements and the modulus of elasticity in stretching of the sealing elements.

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In regard to claim 25, with respect to the sealing elements projecting or protruding from the hem by not less than 0.25 mm, preferably not less than 0.4 mm.

With respect to the sealing elements projecting from the hem by .4mm and .25mm. The specification contains no disclosure of either the critical nature of the claimed dimensions of any unexpected results arising therefrom, and that as such the dimensions are arbitrary and therefore obvious. Such unsupported cannot be a basis for patentability, since where patentability is said to be based upon the particular dimensions or another variable in the claim, the Applicant must show that the .25mm-.4mm protrusion of the sealing element from the hem is critical. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir. 1990).

One having ordinary skill in the art would be able to determine through routine experimentation the ideal dimension for a particular application.

In regard to claim 26, with respect to the sealing elements being secured to the hem by using one of the securing methodologies selected from the group consisting of stitching, interweaving, adhering, stapling or welding. The specification contain no disclosure or either the critical nature of the claimed attaching methods or any unexpected results arising therefrom, and that as such the attaching methods are arbitrary and therefore obvious.

One having ordinary skill in the art would be able to determine through routine experimentation the desired attaching method from many known attaching methods in the apparel arts including stitching, interweaving, adhering, stapling or welding.

In regard to claim 31, with respect to the cross-sectional thickness of the sealing

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elements being not less than 1/4 of the cross-sectional thickness of the hem. The specification contains no disclosure of either the critical nature of the claimed dimensions of any unexpected results arising therefrom, and that as such the dimensions are arbitrary and therefore obvious. Such unsupported cannot be a basis for patentability, since where patentability is said to be based upon the particular dimensions or another variable in the claim, the Applicant must show that the thickness of the sealing element being not less than 1/4 of the cross-sectional thickness of the hem is critical. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir. 1990).

One having ordinary skill in the art would be able to determine through routine experimentation the ideal thickness for the sealing element so that a good seal is achieved between the garment and the respirator.

In regard to claim 33, with respect to the sealing elements having a relative elastic extensibility, based on their original length, of not less than 30 %. The specification contains no disclosure of either the critical nature of the claimed extensibility dimensions of any unexpected results arising therefrom, and that as such the extensibility dimensions are arbitrary and therefore obvious. Such unsupported cannot be a basis for patentability, since where patentability is said to be based upon the particular extensibility dimensions or another variable in the claim, the Applicant must show that the sealing elements having elastic extensibility of not less than 30%. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir. 1990).

One having ordinary skill in the art would be able to determine through routine experimentation the ideal extensibility for a particular application.

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In regard to claim 34, with respect to the material of which the sealing elements consist has, at 25 °C, a modulus of elasticity in stretching in the range of from 5.10⁵ N.m² to 9.10⁶ N.m².

The specification contains no disclosure of either the critical nature of the claimed extensibility dimensions of any unexpected results arising therefrom, and that as such the extensibility dimensions are arbitrary and therefore obvious. Such unsupported cannot be a basis for patentability, since where patentability is said to be based upon the particular extensibility dimensions or another variable in the claim, the Applicant must show that the sealing elements are made from a material that has a modulus of elasticity from 5.10⁵Nm² to 9.10⁶ N.m². *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir. 1990).

One having ordinary skill in the art would be able to determine through routine experimentation the ideal modulus of elasticity for the sealing elements to create a good sealing effect.

6. Claims 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pampuch in view of Wood (GB 2,078,491).

Pampuch teaches a protective suit used with a respirator mask. However, Pampuch fails to teach a the hood having a liner.

In regard to claim 36, Wood teaches a protective garment with a hood, the hood (1) includes a liner (7) on its inside surface with an inside material, the inside material comprising a material selected from the group consisting of: (i) an adsorption-capable

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material on the basis of activated carbon, and (ii) a water-vapor-pervious, but gas-impervious barrier layer preventing or retarding the passage of harmful gases and liquids (page 1, lines 58-65).

In regard to claim 38, Wood teaches the clothing item includes a liner (7) on its inside surface with an inside material, the inside material comprising a material selected from the group consisting of: (i) an adsorption- capable material on the basis of activated carbon, and (ii) a water-vapor-pervious, but gas-impervious barrier layer preventing or retarding the passage of harmful gases and liquids (page 1, lines 58-65).

It would have been obvious to have provided the protective suit with respirator seal of Pampuch with the protective suit liner of Woods, since the protective suit of Pampuch provided with a liner, would provide even further protection to the user from the hazardous elements.

Response to Arguments

7. Applicant's arguments filed 07/07/09 have been fully considered but they are not persuasive.

I) Applicant argues that Pampuch fails to teach a plurality of peripheral sealing elements.

Examiner disagrees, since Pampuch teaches elastic band element (5) having a sealing element at the end of the elastic band (5a: thickened end) and another sealing element next to the end of the elastic band (5c: groove). These two sealing elements (5a, 5c) are the plurality of peripheral elements (see figures). Further, Pampuch teaches the elastic band element (5) is capable of having laterally spaced ribs surrounding the

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inside surface (see column 2, lines 12-15). Laterally spaced ribs attached to an elastic band is illustrated and discussed my Pampuch to represent the ribs (7) on band (6).

II) Applicant argues that Pampuch fails to teach the sealing elements comprised of elastofibers.

Examiner notes that the specification states on page 8 of Applicant's invention that suitable sealing elements can be made from gum, latex, elastic, plastic, etc. Further, Applicant states that an example of a suitable material for the sealing elements can be elastofibers. Elastofibers as defined by Applicant's specification are "...manufactured fibers which are extremely extensible and, after the tensile force has been removed, substantially return into the original state". Further, Applicant details that the elastofibers can include elastomeric fibers formed from natural rubber. Elastic is an example of an elastofiber. Pampuch teaches the sealing elements being made from an elastic band. Elastic bands are made out of elastomers (elastic polymers), also known as rubber, which can be made from natural or synthetic constructions, as desired.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to 3 whose telephone number is (571) 272-4985. The examiner can normally be reached on M-F (8:00-5:30)Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alissa L. Hoey/
Primary Examiner, Art Unit 3765